

## Adjustable Strap Hangers

### CDSTH/CDSTHI

Superior performance and easy installation. The hanger's long straps can be field formed to the required height of the carried member. Face mount nailing options available. Designed and developed for Component Manufacturers to have a wide range of use including:

- Ceiling hanger
- Face mount hanger
- Top flange hanger
- Top flange over-the-back hanger

Reverse flange options available on some products.

### Product Data & Ordering Information:

<b>Material</b>	Structural Grade 50 Type H (ST50H), 50ksi (340 MPa)
<b>Coating</b>	G90 (Z275) hot-dipped galvanized coating (G185 available on CDSTH422 )
<b>Thickness</b>	18ga (43mil), 0.0451" Design thickness, 0.0428" Minimum thickness
	16ga (54mil), 0.0566" Design thickness, 0.0538" Minimum thickness
<b>Packaging</b>	CDSTH29, CDSTH29-2 = 50 pcs/ctn
	CDSTH418 = 40 pcs/ctn
	CDSTH422 = 20 pcs/ctn
	CDSTHI222, CDSTHI322, CDSTHI422, CDSTHI1.81-22 = 10 pcs/ctn

### Installation:

- Use all specified nails indicated in the table. Verify that the header dimensions will accommodate the specified nails.
- When less than the maximum number of nails are used, allowable load must be reduced for each nail eliminated.

### Code Approvals & Performance Standards

- [ASTM A653](#) Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
- [ASTM A1003](#) Standard Specification for Steel Sheet, Carbon, Metallic- and Nonmetallic-Coated for Cold-Formed Framing Members
- [ICC-ES ESR-5062](#) Evaluation report for joist hangers
- [SDS For ASTM A1003 Steel Framing Products](#) For Interior Framing, Exterior Framing and Clips/Accessories

**Sustainability Credits** For more details and LEED letters contact Technical Services at 888-437-3244 or visit [clarkdietrich.com/LEED](http://clarkdietrich.com/LEED).

- **LEED v4.1 MR Credit:** Environmental Product Declarations: EPD (1 point) - Sourcing of Raw Materials (up to 2 points) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points)
- **LEED v4 MR Credit:** Building Product Disclosure and Optimization: EPD (1 point) - Sourcing of Raw Materials (1 point) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points) - Innovation Credit (up to 2 points).





CDSTH29



Face Installation



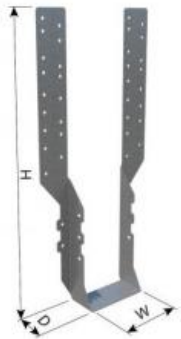
Top Installation



CDSTH29-2



Face Installation



CDSTH418



Face Installation



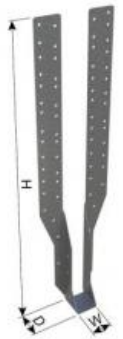
Top Installation



CDSTH422



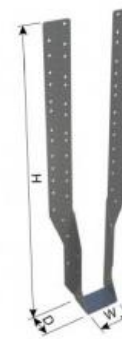
Top Installation



CDSTHI222



Top Installation



CDSTHI322



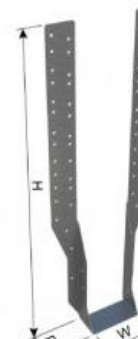
Top Installation



CDSTHI1.81-22



Top Installation



CDSTHI422



Top Installation

**Spruce-Pine Fir (0.42 Specific Gravity)**

Product Code	Gauge	Hanger Dimension (in)			Minimum Header		Common Nail Type Fastener						Allowable Loads (lbs)				
		Clear Seat Width	Overall Height	Overall Depth	Breadth (in)	Depth (in)	Joist at 90°		Joist at 45°		Header			Downward			Uplift
							Size	Qty	Size	Qty	Size	Qty in Face	Qty in Top	C <sub>D</sub> =1.00	C <sub>D</sub> =1.15	C <sub>D</sub> =1.25	C <sub>D</sub> =1.60
<b>TOP MOUNT INSTALLATION</b>																	
CDSTH29	18	1-5/8	8-25/32	2-5/16	3	5-1/2	na	0	10d Comm	4	10d Comm	4	4	1750	1750	1750	675
CDSTH29-2	18	3-1/8	8-25/32	2-5/16	3	5-1/2	na	0	10d Comm	4	10d Comm	4	4	1750	1750	1750	675
CDSTH418	16	3-5/8	16-1/16	1-31/32	3	11-1/4	10d Comm	6	na	0	16d Comm	2	4	2205	2205	2205	0
CDSTH422	16	3-5/8	22-1/16	1-31/32	3	11-1/4	10d Comm	6	na	0	16d Comm	2	4	2205	2205	2205	0
CDSTHI1.81/22	16	1-13/16	21-13/16	1-31/32	3	11-1/4	10d Comm	2	na	0	10d Comm	2	4	1195	1195	1195	0
CDSTHI222	16	1-9/16	21-15/16	1-31/32	3	11-1/4	10d Comm	2	na	0	10d Comm	2	4	1195	1195	1195	0
CDSTHI322	16	2-9/16	21-7/16	1-31/32	3	11-1/4	10d Comm	2	na	0	10d Comm	2	4	1195	1195	1195	0
CDSTHI422	16	3-9/16	20-15/16	1-31/32	3	11-1/4	10d Comm	2	na	0	10d Comm	2	4	1195	1195	1195	0
<b>FACE MOUNT INSTALLATION</b>																	
CDSTH29	18	1-5/8	8-25/32	2-5/16	3	9-1/4	na	0	10d Comm	4	10d Comm	16	0	1615	1615	1615	675
CDSTH29-2	18	3-1/8	8-25/32	2-5/16	3	9-1/4	na	0	10d Comm	4	10d Comm	16	0	1615	1615	1615	675
CDSTH418	16	3-5/8	16-1/16	1-31/32	1-1/2	16-1/2	na	0	16d Comm	6	16d Comm	22	0	2895	2895	2895	1520

**Notes:** For SI: 1 inch = 25.4 mm, 1 pound (lb) = 4.45 N

**1** See images for hanger dimension definitions of W, H, and D.

**2** Refer to Section 3.2.3 of ESR-5062 for nail sizes and the required minimum physical properties.

**3** The tabulated allowable loads have been adjusted for the load duration factors, CD, as shown, in accordance with the NDS. The tabulated allowable loads do not apply to loads of other load durations, and are not allowed to be adjusted for other load durations. See Sections 4.1 and 4.2 of ESR-5062 for additional design and installation requirements.

**4** The tabulated allowable loads are for installations on wood members complying with Section 3.2.1 of the ESR-5062 report. Wood members must also have a reference compressive perpendicular to grain design value, F<sub>c</sub>-perp, respectively for the wood species noted in the table.

**5** The tabulated allowable uplift loads have been increased for wind and seismic loading with no further increase is allowed. The tabulated allowable uplift loads must be reduced when other load duration govern.

**6** For face mount installation, when more holes in header flanges are available than required fasteners, fasteners must be evenly divided between header flanges and placed in the lowermost 4 holes in each header flange and the uppermost available 2 holes of each header flange, with remaining fasteners evenly distributed throughout remaining header flange holes.

**7** For top mount installations, fasteners in top of header must be evenly divided between header flanges. The furthest fastener in each top flange from the hanger face of the header must be at least 2 inches for the CDSTH418 and CDSTH422, and 2.25 inches for the CDSTH29 and CDSTH29-2, and 2.5 inches for the CDSTHI1.81/22, CDSTHI222, CDSTHI322, and CDSTHI422. Fasteners in face of header must be evenly divided between header flanges and applied in the lowermost holes of each header flange.

**8** All fasteners must be placed a minimum of 1/4" from any edge of members.

**9** CDSTH hangers have a torsional moment capacity rating of 75 pounds (334 N) times the depth of the joist at which the lateral movement of either the top or bottom of the joist with respect to the original vertical position of the joist is 0.125 inch (3.2mm).

**Hangers** 06.00.00 (Wood, Plastics and Composites)
**Douglas Fir-Larch (0.50 Specific Gravity)**

Product Code	Gauge	Hanger Dimension (in)			Minimum Header		Common Nail Type Fastener						Allowable Loads (lbs)				
		Clear Seat Width	Overall Height	Overall Depth	Breadth (in)	Depth (in)	Joist at 90°		Joist at 45°		Header			Downward			Uplift
							Size	Qty	Size	Qty	Size	Qty in Face	Qty in Top	C <sub>D</sub> =1.00	C <sub>D</sub> =1.15	C <sub>D</sub> =1.25	C <sub>D</sub> =1.60
<b>TOP MOUNT INSTALLATION</b>																	
CDSTH29	18	1-5/8	8-25/32	2-5/16	3	5-1/2	na	0	10d Comm	4	10d Comm	4	4	2085	2085	2085	805
CDSTH29-2	18	3-1/8	8-25/32	2-5/16	3	5-1/2	na	0	10d Comm	4	10d Comm	4	4	2085	2085	2085	805
CDSTH418	16	3-5/8	16-1/16	1-31/32	3	11-1/4	10d Comm	6	na	0	16d Comm	2	4	2625	2625	2625	0
CDSTH422	16	3-5/8	22-1/16	1-31/32	3	11-1/4	10d Comm	6	na	0	16d Comm	2	4	2625	2625	2625	0
CDSTHI1.81/22	16	1-13/16	21-13/16	1-31/32	3	11-1/4	10d Comm	2	na	0	10d Comm	2	4	1420	1420	1420	0
CDSTHI222	16	1-9/16	21-15/16	1-31/32	3	11-1/4	10d Comm	2	na	0	10d Comm	2	4	1420	1420	1420	0
CDSTHI322	16	2-9/16	21-7/16	1-31/32	3	11-1/4	10d Comm	2	na	0	10d Comm	2	4	1420	1420	1420	0
CDSTHI422	16	3-9/16	20-15/16	1-31/32	3	11-1/4	10d Comm	2	na	0	10d Comm	2	4	1420	1420	1420	0
<b>FACE MOUNT INSTALLATION</b>																	
CDSTH29	18	1-5/8	8-25/32	2-5/16	3	9-1/4	na	0	10d Comm	4	10d Comm	16	0	1925	1925	1925	805
CDSTH29-2	18	3-1/8	8-25/32	2-5/16	3	9-1/4	na	0	10d Comm	4	10d Comm	16	0	1925	1925	1925	805
CDSTH418	16	3-5/8	16-1/16	1-31/32	1-1/2	16-1/2	na	0	16d Comm	6	16d Comm	22	0	3450	3450	3450	1810

**Notes:** For SI: 1 inch = 25.4 mm, 1 pound (lb) = 4.45 N

1 See images for hanger dimension definitions of W, H, and D.

2 Refer to Section 3.2.3 of ESR-5062 for nail sizes and the required minimum physical properties.

3 The tabulated allowable loads have been adjusted for the load duration factors, CD, as shown, in accordance with the NDS. The tabulated allowable loads do not apply to loads of other load durations, and are not allowed to be adjusted for other load durations. See Sections 4.1 and 4.2 of ESR-5062 for additional design and installation requirements.

4 The tabulated allowable loads are for installations on wood members complying with Section 3.2.1 of the ESR-5062 report. Wood members must also have a reference compressive perpendicular to grain design value, Fc-perp, respectively for the wood species noted in the table.

5 The tabulated allowable uplift loads have been increased for wind and seismic loading with no further increase is allowed. The tabulated allowable uplift loads must be reduced when other load duration govern.

6 For face mount installation, when more holes in header flanges are available than required fasteners, fasteners must be evenly divided between header flanges and placed in the lowermost 4 holes in each header flange and the uppermost available 2 holes of each header flange, with remaining fasteners evenly distributed throughout remaining header flange holes.

7 For top mount installations, fasteners in top of header must be evenly divided between header flanges. The furthest fastener in each top flange from the hanger face of the header must be at least 2 inches for the CDSTH418 and CDSTH422, and 2.25 inches for the CDSTH29 and CDSTH29-2, and 2.5 inches for the CDSTHI1.81/22, CDSTHI222, CDSTHI322, and CDSTHI422. Fasteners in face of header must be evenly divided between header flanges and applied in the lowermost holes of each header flange.

8 All fasteners must be placed a minimum of 1/4" from any edge of members.

9 CDSTH hangers have a torsional moment capacity rating of 75 pounds (334 N) times the depth of the joist at which the lateral movement of either the top or bottom of the joist with respect to the original vertical position of the joist is 0.125 inch (3.2mm).

**Southern Pine (0.55 Specific Gravity)**

Product Code	Gauge	Hanger Dimension (in)			Minimum Header		Common Nail Type Fastener						Allowable Loads (lbs)				
		Clear Seat Width	Overall Height	Overall Depth	Breadth (in)	Depth (in)	Joist at 90°		Joist at 45°		Header			Downward		Uplift	
							Size	Qty	Size	Qty	Size	Qty in Face	Qty in Top	C <sub>D</sub> =1.00	C <sub>D</sub> =1.15	C <sub>D</sub> =1.25	C <sub>D</sub> =1.60
<b>TOP MOUNT INSTALLATION</b>																	
CDSTH29	18	1-5/8	8-25/32	2-5/16	3	5-1/2	na	0	10d Comm	4	10d Comm	4	4	2295	2295	2295	885
CDSTH29-2	18	3-1/8	8-25/32	2-5/16	3	5-1/2	na	0	10d Comm	4	10d Comm	4	4	2295	2295	2295	885
CDSTH418	16	3-5/8	16-1/16	1-31/32	3	11-1/4	10d Comm	6	na	0	16d Comm	2	4	2885	2885	2885	0
CDSTH422	16	3-5/8	22-1/16	1-31/32	3	11-1/4	10d Comm	6	na	0	16d Comm	2	4	2885	2885	2885	0
CDSTHI1.81/22	16	1-13/16	21-13/16	1-31/32	3	11-1/4	10d Comm	2	na	0	10d Comm	2	4	1565	1565	1565	0
CDSTHI222	16	1-9/16	21-15/16	1-31/32	3	11-1/4	10d Comm	2	na	0	10d Comm	2	4	1565	1565	1565	0
CDSTHI322	16	2-9/16	21-7/16	1-31/32	3	11-1/4	10d Comm	2	na	0	10d Comm	2	4	1565	1565	1565	0
CDSTHI422	16	3-9/16	20-15/16	1-31/32	3	11-1/4	10d Comm	2	na	0	10d Comm	2	4	1565	1565	1565	0
<b>FACE MOUNT INSTALLATION</b>																	
CDSTH29	18	1-5/8	8-25/32	2-5/16	3	9-1/4	na	0	10d Comm	4	10d Comm	16	0	2115	2115	2115	885
CDSTH29-2	18	3-1/8	8-25/32	2-5/16	3	9-1/4	na	0	10d Comm	4	10d Comm	16	0	2115	2115	2115	885
CDSTH418	16	3-5/8	16-1/16	1-31/32	1-1/2	16-1/2	na	0	16d Comm	6	16d Comm	22	0	3795	3795	3795	1995

**Notes:** For SI: 1 inch = 25.4 mm, 1 pound (lb) = 4.45 N

**1** See images for hanger dimension definitions of W, H, and D.

**2** Refer to Section 3.2.3 of ESR-5062 for nail sizes and the required minimum physical properties.

**3** The tabulated allowable loads have been adjusted for the load duration factors, CD, as shown, in accordance with the NDS. The tabulated allowable loads do not apply to loads of other load durations, and are not allowed to be adjusted for other load durations. See Sections 4.1 and 4.2 of ESR-5062 for additional design and installation requirements.

**4** The tabulated allowable loads are for installations on wood members complying with Section 3.2.1 of the ESR-5062 report. Wood members must also have a reference compressive perpendicular to grain design value, F<sub>c</sub>-perp, respectively for the wood species noted in the table.

**5** The tabulated allowable uplift loads have been increased for wind and seismic loading with no further increase is allowed. The tabulated allowable uplift loads must be reduced when other load duration govern.

**6** For face mount installation, when more holes in header flanges are available than required fasteners, fasteners must be evenly divided between header flanges and placed in the lowermost 4 holes in each header flange and the uppermost available 2 holes of each header flange, with remaining fasteners evenly distributed throughout remaining header flange holes.

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